
U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

Gordon P. Eaton, Director

Reston, VA 20192

For information, contact:

M. Michael Miller, Commodity Specialist

Telephone: (703) 648-7716, Fax: (703) 648-7722

E-mail: mmiller1@usgs.gov

Christine Ferri (Data), (703) 648-7967

MINES-DATA: (703) 648-7799

MINES FaxBack: (703) 648-4999

Internet: <http://minerals.er.usgs.gov/minerals>

FLUORSPAR IN THE SECOND QUARTER 1996

As expected, quarterly consumption of acid grade decreased in the second quarter because of the closure of Elf Atochem's hydrofluoric acid (HF) plant and the 7-week shut down of Du Pont's HF plant at La Porte, TX, which was refurbished to allow it to run at its rated capacity.

Sogem-Afrimet, Hastie Mining, and Orbex Resources, aided in their negotiations by Moody Minerals, have signed a letter of agreement to purchase the fluorspar processing facilities of Ozark-Mahoning Co. The agreement does not include the mines, mineral rights, or mining equipment. The partners plan to utilize the facilities at Rosiclare, IL, to screen and dry material purchased from the National Defense Stockpile and imported fluorspar. Current plans do not include operation of the flotation mill. Operations by Orbex Resources at the Salem, KY, mill have ceased. The two month option to buy the Kentucky properties from USX, which included a two-month test run of the Salem flotation mill, expired and the mill is currently inactive.¹

Canada's Burin Minerals Ltd. completed a further fish population and habitat study, and has reached a tentative agreement with the Canadian Department of Fisheries and Oceans regarding the no-net-loss compensation agreement. An independent assessment confirmed the previous assessments of 5.4 million tons of reserves grading 50% CaF₂

for the Blue Beach North and Tarefare deposits combined. Hiring of senior staff and work on financing is continuing.²

The Defense National Stockpile Center awarded about 15,200 tons (16,800 short tons) of acid-grade fluorspar to Allied Signal Inc., Morristown, NJ, for a value of about \$1,700,000. This sale exhausted the amount of acid grade authorized for sale during fiscal year 1996.³

The amount of National Defense Stockpile material committed for sale pending shipment increased in the second quarter by 74,000 tons to 375,000 tons. As of June 30, 1996, there was 314,000 tons of acid grade and 61,000 tons of metallurgical grade so classified. This is material that has been awarded to approved bidders, but has not been removed from the Defense Stockpile depots. If combined with reported second quarter industry stocks, total industry stocks would be 478,000 tons.

¹Orbex Resources Inc. Private communication, Sept. 9, 1996.

²Burin Minerals Ltd. Quarterly Progress Report. June 30, 1996.

³Defense Logistics Agency. Stockpile Accepts Acid-Grade Fluorspar Offer (news release). June 19, 1996.

TABLE 1
SALIENT FLUORSPAR STATISTICS 1/

(Metric tons unless otherwise specified)

	Second quarter 1995	Third quarter 1995	Fourth quarter 1995	First quarter 1996	Second quarter 1996	Total year to date 1996
Shipments	W	W	W	W	--	W
Imports for consumption	141,000	146,000	122,000	179,000	118,000	297,000
Value per ton, c.i.f. U.S. port, acid grade	\$123.00	\$126.00	\$131.00	\$140.00	\$141.00	\$140.00 2/
Value per ton, c.i.f. U.S. port, metallurgical	\$93.00	\$101.00	\$107.00	\$96.00	\$97.00	\$97.00 2/
Exports	8,430	5,870	6,510	9,180	6,950	16,100
End of quarter stocks: consumer 3/	74,300	74,900	92,000	105,000	103,000	103,000
Fluorspar equivalent of imported hydrofluoric acid 4/	28,100	28,000	18,100	31,000	39,800	70,800
Fluorspar equivalent of imported cryolite	2,710	630	1,680	1,840	2,430	4,270
Quarterly reported fluorspar consumption	137,000	124,000	135,000	143,000 r/	119,000	262,000

r/ Revised. W Withheld to avoid disclosing company proprietary data.

1/ Data are rounded to three significant digits.

2/ Average value for year to date 1996.

3/ Does not include material purchased from the National Defense Stockpile by traders or indirect consumers.

4/ Does not include hydrofluoric acid from foreign trade zone.

TABLE 2
CONSUMPTION OF FLUORSPAR BY END USE AND ASSAY RANGE 1/
(DOMESTIC AND FOREIGN IN THE UNITED STATES)

(Metric tons)

End use or product	First quarter 1996			Second quarter 1996			1996 Year to date
	More than 97% calcium fluoride	Not more than 97% calcium fluoride	Total	More than 97% calcium fluoride	Not more than 97% calcium fluoride	Total	
Hydrofluoric acid and aluminum fluoride	132,000	--	132,000	105,000	--	105,000	236,000
Basic oxygen furnaces	--	3,130 r/	3,130 r/	--	3,710	3,710	6,840
Electric furnaces	W	3,240 r/	3,240 r/	W	5,450	5,450	8,680
Other uses or products 2/	3,420	1,910	5,320	3,210	1,540	4,750	10,100
Total	W	8,280 r/	143,000 r/	108,000	10,700	119,000	262,000
Stocks, end of quarter	101,000	3,780	105,000	96,900	5,820	103,000	103,000

r/ Revised. W Withheld to avoid disclosing company proprietary data.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes acid grade used in electric furnaces, enamel, glass and fiberglass, steel castings, and welding rod coatings.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FLUORSPAR, BY COUNTRY 1/ AND VALUE 2/ 3/

(Metric tons unless otherwise specified)

	Second quarter 1995		Third quarter 1995		Fourth quarter 1995		First quarter 1996		Second quarter 1996		Total year to date	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
Containing more than 97% calcium fluoride:												
China 4/	89,300	\$11,200	59,300	\$7,630	82,800	\$11,000	146,000	\$20,700	48,600	\$7,110	194,000	\$27,900
France	91	48	18	9	73	39	18	9	--	--	18	9
Germany	--	--	--	--	--	--	--	--	4	5	4	5
Japan	--	--	88	11	--	--	--	--	--	--	--	--
Mexico	5,950	746	16,300	1,760	6,700	918	3,580	506	4,550	631	8,130	1,140
Morocco	--	--	--	--	114	32	--	--	--	--	--	--
South Africa	22,200	2,540	46,700	6,000	15,600	1,840	20,500	2,510	42,800	5,760	63,400	8,270
Total	118,000	14,500	122,000	15,400	105,000	13,800	170,000	23,800	96,000	13,500	266,000	37,300
Containing not more than 97% calcium fluoride:												
Canada	--	--	--	--	--	--	53	16	70	23	123	39
China	--	--	--	--	8,370	1,020	--	--	--	--	--	--
Mexico	23,000	2,140	23,500	2,380	8,830	820	9,300	883	21,600	2,070	30,900	2,960
Total	23,000	2,140	23,500	2,380	17,200	1,840	9,350	899	21,700	2,100	31,000	3,000

1/ Imports for consumption include imports of immediate entry, and warehouse withdrawals.

2/ C.i.f. at U.S. ports.

3/ Data are rounded to three significant digits; may not add to totals shown.

4/ Data does not agree with published Bureau of the Census data due to adjustments made by the U.S. Geological Survey.

Source: Bureau of the Census.

TABLE 4
IMPORTS FOR CONSUMPTION OF HYDROFLUORIC ACID 1/

(Metric tons unless otherwise specified)

	Second quarter 1995		Third quarter 1995		Fourth quarter 1995		First quarter 1996		Second quarter 1996		Total year to date 1996	
	Quantity	Value 2/ (thousands)	Quantity	Value 2/ (thousands)	Quantity	Value 2/ (thousands)	Quantity	Value 2/ (thousands)	Quantity	Value 2/ (thousands)	Quantity	Value 2/ (thousands)
Brazil	18	\$18	--	--	--	--	--	--	--	--	--	--
Canada	29	61	26	\$63	17	\$57	17	\$71	32	\$105	49	\$176
France	--	--	21	21	18	20	55	59	54	57	109	116
Germany	36	84	4	21	35	82	50	96	20	45	70	141
Japan	178	666	136	543	112	435	79	286	174	643	253	929
Mexico	18,500	17,100	18,500	17,000	11,900	10,700	20,500	18,800	26,200	24,600	46,700	43,400
Sweden	--	--	--	--	--	--	--	--	(3/)	4	(3/)	4
Switzerland	--	--	--	--	--	--	--	--	(3/)	4	(3/)	4
Total	18,700	17,900	18,600	17,700	12,100	11,300	20,700	19,300	26,500	25,400	47,200	44,700

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ C.i.f. at U.S. ports.

3/ Less than 1/2 unit.

Source: Bureau of the Census.